Title: POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Assignee: Intel Corporation

Page 6 Dkt: 884.078US1 (INTEL)

REMARKS

This responds to the Office Action mailed on March 24, 2005.

Claims 8 and 12-14 are amended. No claims are canceled or added. As a result, claims 8-16, 20-21, and 23-27 remain pending in this application. In the most recent Office Action, the Examiner's list of pending claims is incorrect, because claim 22 was previously canceled in Applicants' October 12, 2004 response.

For the convenience of the Examiner, Applicants' remarks concerning the claims will be presented in the same order in which the Examiner presented them in the Office Action.

Amendments to Claims 8 and 12-14

Claim 8 has been amended, per the Examiner's suggestion, by moving the recitation of the "stylus" and its associated elements to immediately after the preamble.

Claim 12 has been amended by reciting that the electronic voice signals are transmitted from the hand-held stylus to either a personal digital assistant (PDA) or a personal computer (PC). Support for this amendment may be found, for example, on page 6, lines 13-15 of the original disclosure.

Claim 13 has been amended to recite the condition wherein the electronic voice signals are transmitted to the PC; to recite the complete language from the third operation of claim 12 for clarity; and to recite that the PDA stores the translated voice data, again for clarity.

Claim 14 has been amended to recite the condition wherein the electronic voice signals are transmitted to the PDA; to recite the complete language from the third operation of claim 12 for clarity; to insert the word "transmitted" for consistency with corresponding language of claim 13; and to recite that the PDA stores the translated voice data, again for clarity.

No new matter has been introduced.

Objection to Claims 8-11, 20, and 21

Claims 8-11, 20 and 21 were objected to. The Examiner asserted that claim 8 would be clearer if rewritten by reciting "a stylus, etc." after the preamble.

thank the Examiner for this suggestion.

Title: POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Assignee: Intel Corporation

As indicated above, claim 8 has been rewritten as suggested by the Examiner. Applicants

Rejection of Claims 8-16, 20, 21, and 23-27 Under 35 U.S.C. §112, First Paragraph

Claims 8-16, 20, 21, and 23-27 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

The Examiner asserts that the specification as originally filed does not provide support for the claims recitation "electronic voice signals". The Examiner asserts the phrase "electronic voice signal" was not described anywhere in the specification as recited in the above claims.

In response, Applicants point out to the Examiner that the phrase "electronic voice signals" appears in at least four places in the original specification, as seen from Table 1 below.

Term		Page 4	Lines	
"electronic voice signals"			27	
66	66	"	5	5
66	66		7	22
66	66	"	8	20-21

Table 1

The Examiner asserts that the specification as originally filed does not disclose "the processor to translate electronic voice signals into translated voice data, a wireless receiver to receive the electronic voice signals".

In response, Applicants point out to the Examiner the following language on page 5, lines 7-10 of the original disclosure:

The personal computer includes a wireless receiver for receiving wireless transmissions from the stylus. Voice signals received by the personal computer are translated into computer recognizable or readable data.

Title: POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Assignee: Intel Corporation

The Examiner further asserts "the disclosure does not teach one skilled in the art how a wireless receiver receives an electronic voice signal within the PC (from the process)". In response, Applicants assert that it would be well within the capability of one skilled in the art to design a wireless receiver as part of a PC to receive wireless transmissions from external equipment having a wireless transmitter. For example, U.S. Pat. No. 5,752,232 (issued May 12, 1998 prior to the filing date of the present application) discloses a wireless handset 100 (FIG. 1) transmitting "electronic voice signals" in the form of digital speech (see col. 4, lines 49-62) via a wireless transceiver (not illustrated) to a microprocessor-based voice-actuated device 120 that implicitly contains a wireless receiver (not illustrated) to receive the "electronic voice signals" and translate them, using a speech-recognition unit 128, into "translated voice data" in the form of unique word identifiers (col. 5, line 11). In addition, PC's are known to receive wireless transmissions from other wireless equipment, such as wireless keyboards and wireless mice. Applicants fail to understand the Examiner's quotation of the phrase "from the process", because it does not appear in these claims.

The Examiner further asserts that the specification as originally filed does not provide support for the claim 13 recitation "a personal computer (PC) receiving the electronic voice signals transmitted from the hand-held stylus; the PC translating the electronic voice signals into translated voice data; and the PC transmitting the translated voice data to the PDA".

In response, Applicants point out to the Examiner that each of the above limitations is supported by the original specification, as seen from Table 2 below.

Limitation	Page	Lines
a personal computer (PC) receiving	5	4-8
the electronic voice signals transmitted		
from the hand-held stylus		
the PC translating the electronic voice	5	8-10
signals into translated voice data		

Serial Number: 09/211,942 Filing Date: December 15, 1998

Title: POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Assignee: Intel Corporation

the PC transmitting the translated	5	16-17
voice data to the PDA		

Table 2

In summary, Applicants strongly assert that all of the pending claims 8-16, 20, 21, and 23-27 fully comply with the requirements of 35 U.S.C. §112, first paragraph.

Rejection of Claims 8-11, 20, and 21 Under 35 U.S.C. §112, Second Paragraph

Claims 8-11, 20, and 21 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the inventive subject matter.

The Examiner asserts that the claim recitation of claim 8, lines 3-4 "a wireless receiver to receive the electronic voice signals" is not clear. The Examiner queries whether this wireless receiver is located inside the PC. Applicants respond that on page 5, lines 7-8 of the original disclosure state that "The personal computer includes a wireless receiver for receiving wireless transmissions from the stylus." Yes, in an embodiment, the wireless receiver is located inside the PC.

The Examiner further queries "why you need a wireless receiver to receive electronic voice signal from the processor of the PC", and that "it is also not clear from where the electronic voice signal is generated". Applicants respond that claim 8 does not recite that the wireless receiver receives any electronic voice signal from the processor of the PC, so Applicants fail to understand the Examiner's question. In an attempt to answer the Examiner's question, Applicants respond that the electronic voice signals are "generated" by the microphone of the stylus, and then they are transmitted by the transmitter of the stylus to either the PC or the PDA.

Regarding claim 8, line 7, the Examiner asserts the phrase "to display the translated voice data" is confusing. The Examiner queries "how does it display the voice data", and the Examiner further asks "shouldn't the PDA have to receive the voice data before it is displayed?" Applicants respond "yes", the PDA receives the transmitted translated voice data from the PC before it is displayed. Applicants further respond that the order of recitation in claim 8 is

Serial Number: 09/211,942 Filing Date: December 15, 1998

Title: POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Assignee: Intel Corporation

immaterial, and that it should be clear to one of ordinary skill in the art that the translated voice data is received from the PC before it is displayed. If the Examiner prefers that the order of reciting the "touch screen" and the "wireless receiver" be reversed, Applicants will be happy to comply, although Applicants assert that claim 8 is clear and fully satisfies 35 U.S.C. §112, second paragraph, as presently worded.

Regarding claim 8, the Examiner asserts that the last 2-3 lines, "output/transmit the electronic voice signals", are not clear. The Examiner queries "which one of the electronic voice signals is the applicant referring to? The PC or the PDA electronic voice signals"? Applicants respond that the "electronic voice signals" in the last 3 lines of claim 8 are the same. The microphone outputs electronic voice signals, and the transmitter transmits the electronic voice signals from the microphone to either the PC or the PDA. The Examiner further queries "doesn't the stylus have to receive or generate an electronic voice signal in order to output or transmit the voice signals"? Applicants respond that claim 8 recites that the stylus comprises a microphone to detect speech and to output electronic voice signals, and that the stylus further comprises a transmitter to transmit the electronic voice signals from the microphone. Applicants further assert that the operation of the stylus in detecting speech and transmitting electronic voice signals, as described in Applicants' original specification, and as recited in claim 8, should be clear to one of ordinary skill in the art and fully satisfies 35 U.S.C. §112, second paragraph.

Regarding claim 13, the Examiner asserts that the language "wherein translating the electronic voice signals comprises: a personal computer (PC) receiving the electronic voice signals transmitted from the hand-held stylus" is very confusing. The Examiner queries how the electronic voice signals that are translated into translated voice data and stored in the PDA (claim 12, last two lines) can be transmitted by the hand-held stylus to the PC? Applicants respond that the operations recited in claim 13 merely describe how the last-recited operations of "translating" and "storing" in claim 12 are performed. That is, the "translating" and "storing" operations of claim 12 are performed by the operations of claim 13. As mentioned earlier, claim 13 has been amended to clarify the operations.

Regarding claims 13 and 14, the Examiner asserts that the language "wherein translating the electronic voice signals comprises: the personal computer (PC) translating the electronic voice signals into translated voice data; and the PC transmitting the translated voice data to the

PDA" is unclear. The Examiner queries how the electronic voice signals that are translated into translated voice data and stored in the PDA (claim 12, last two lines) is again translated into voice data. Applicants respond that the operations recited in claims 13 and 14 merely describe how the last-recited operations of "translating" and "storing" in claim 12 are performed. That is, the "translating" and "storing" operations of claim 12 are performed by the operations of claim 13 or alternatively by the operations of claim 14. As mentioned earlier, claims 13 and 14 have been amended to clarify the operations.

In summary, Applicants strongly assert that all of the pending claims 8-11, 20, and 21 fully comply with the requirements of 35 U.S.C. §112, second paragraph.

Rejection of Claims 12-15 Under 35 U.S.C. §103(a) as Unpatentable over Stevens in View of Ohashi and Register

Claims 12-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Stevens (U.S. 5,769,643) in view of Ohashi (U.S. 5,581,783) and Register et al. (U.S. 5,606,594).

Applicants note with appreciation that the previous rejection of claims 8-11, 16, 20-21, and 23-27 under 35 U.S.C. §103(a) has been withdrawn by the Examiner.

Applicants will discuss below the patentability of independent claim 12 over the asserted combination of Stevens, Ohashi, and Register, but first Applicants will briefly summarize the subject matter disclosed in these three references. In addition, Applicants will point out where these references differ significantly from Applicants' pending claims.

Stevens discloses an instruction communication network having a first computer 12, which may be operated by a student, and a second computer 14 operated by a teacher. The first and second computers may be in wireless communication with each other (col. 2, lines 53-55). In one embodiment, the first computer 12 may be a personal digital assistant ("PDA") (see col. 3, lines 34-39) having a display 56, a "dumb" stylus 55, microphone 67, and sound circuitry 65.

Regarding independent claim 12, it is noted that Stevens discloses a "dumb" stylus 55 (FIG. 4) having no electronic elements such as a microphone or transmitter, as recited in claim 12.

Ohashi discloses a multimedia information capturing system comprising a stylus 1 (FIG. 6a) having a microphone 71, a wireless transmitter 18, and a wireless receiver 75. The system

Filing Date: December 15, 1998

Title: POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Assignee: Intel Corporation

additionally includes an associated "data processing unit" 3 (FIG. 6b) that has a wireless transmitter 83, a wireless receiver 32, a voice-reproducing unit 83, and a speaker 84. Voice information captured with the stylus can be reproduced in the data processing unit's speaker 84. It will be noted that in Ohashi the term "voice data" is used to describe recorded acoustic voice signals, as opposed to "translated voice data" or "translated voice information" as recited in Applicants' independent claim 12. In Applicants' disclosure, "translated voice data" or "translated voice information" refers to speech-converted data or information. Support for this may be found at several places within Applicants' original disclosure including, for example, page 6, lines 1-4:

Page 12

Dkt: 884.078US1 (INTEL)

When the personal digital assistant returns to a location where communication with the personal computer is possible, the recorded voice data is transmitted to the personal computer for translation, and the translated data is transmitted back to the personal digital assistant.

Register discloses a PDA with a built-in microphone to convert acoustical energy into electrical energy (col. 2, lines 61-64). No disclosure could be found in Register concerning translating electronic voice signals into translated voice data, i.e. speech-converted data.

Regarding the rejection of independent claim 12, Applicants respectfully assert that a *prima facie* case of obviousness has not been established, and that the suggested combination of Stevens in view of Ohashi and Register is based upon hindsight and would not have been suggested but for Applicants' own disclosure.

The Examiner has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* The MPEP §2142 contains explicit directions to the Examiner in consonance with the *In re Fine* holding:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the

Serial Number: 09/211,942 Filing Date: December 15, 1998

(Fed. Cir. 1991)).

Title: POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Assignee: Intel Corporation

art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (Citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438

Regarding independent claim 12, a *prima facie* case of obviousness is not established, because the references, even when combined as the Examiner suggests, fail to disclose all of the recited elements. The combination of references fails to disclose translating electronic voice signals into translated voice data and storing the translated voice data in a PDA. This could not be found in any of the three references. No disclosure regarding speech-to-text conversion could be found anywhere in Stevens, Ohashi, and Register. Thus these references cannot be combined to teach or make obvious "translating the electronic voice signals into translated voice data and storing the translated voice data in the PDA".

In summary, even if the Stevens, Ohashi, and Register references were to be combined as suggested by the Examiner, they fail to make a *prima facie* case of obviousness, because they fail to teach or suggest all the claim limitations.

It is therefore respectfully requested that the rejection of independent claim 12 under 35 U.S.C. §103(a) as being unpatentable over Stevens in view of Ohashi and Register be withdrawn.

Dependent claims 13-15, which depend from independent claim 12, and incorporate all of the limitations therein, are also asserted to be allowable for the reasons presented above.

Additional Elements and Limitations

Applicants consider additional elements and limitations of claims 8-16, 20-21, and 23-27 to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

Serial Number: 09/211,942 Filing Date: December 15, 1998

Title: POINTING DEVICE WITH INTEGRATED AUDIO INPUT

Assignee: Intel Corporation

Conclusion

Applicants respectfully submit that claims 8-16, 20-21, and 23-27 are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney, Walter W. Nielsen (located in Phoenix, Arizona) at (602) 298-8920, or the below-signed attorney (located in Minneapolis, Minnesota) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

JIM A. LARSON ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Page 14

Dkt: 884.078US1 (INTEL)

Attorneys for Intel Corporation

P.O. Box 2938

Minneapolis, Minnesota 55402

(612) 349-9592

Date Sept. 26, 2005

Ann M. McCrackin

Ann M. McCracki Reg. No. 42,858

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450,

Alexandria, VA 22313-1450, on this 26 day of September, 2005.

Name

Signature